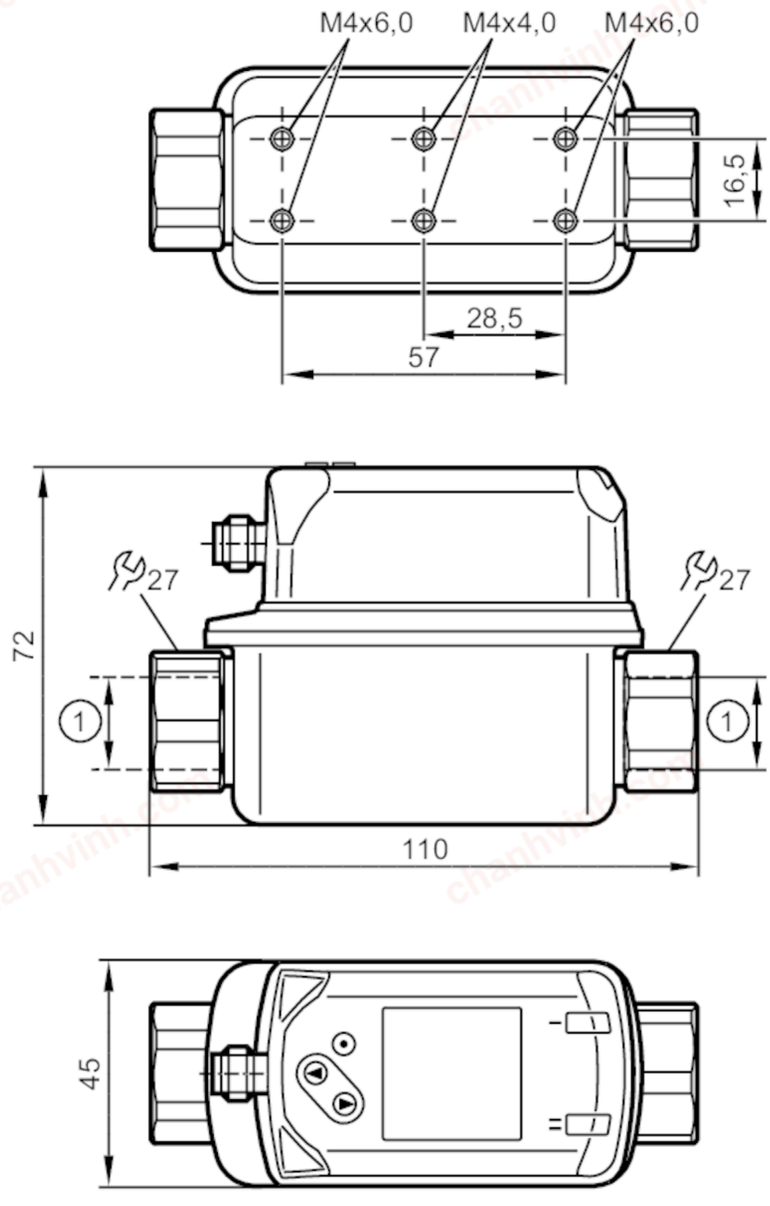
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SV4200

Vortex flow meter with display

SVR12XXXIRKG/US-100



1 G 1/2 DN 8

Product characteristics			
Number of inputs and outputs		Number of digital outputs: 2	
Measuring range		1...20 l/min	0.06...1.2 m³/h
Process connection		threaded connection G 1/2 DN8	
Application			
Special feature		Gold-plated contacts	
Application		for industrial applications	
Media		water; glycol solutions; coolants	
Medium temperature	[°C]	-10...90	
Pressure rating	[bar]	12	

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Pressure rating [Mpa]	1.2	
Note on pressure rating	up to 40 °C	
MAWP (for applications according to CRN) [bar]	3.9	
Electrical data		
Operating voltage [V]	18...30 DC	
Current consumption [mA]	< 30	
Min. insulation resistance [MΩ]	100; (500 V DC)	
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time [s]	< 3	
Inputs / outputs		
Number of inputs and outputs	Number of digital outputs: 2	
Outputs		
Total number of outputs	2	
Output signal	switching signal; frequency signal; IO-Link; (configurable)	
Electrical design	PNP/NPN	
Number of digital outputs	2	
Output function	normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC [V]	2.5	
Permanent current rating of switching output DC [mA]	100	
Short-circuit protection	yes	
Overload protection	yes	
Measuring/setting range		
Measuring range	1...20 l/min	0.06...1.2 m³/h
Display range	0...24 l/min	0...1.44 m³/h
Resolution	0.1 l/min	0.005 m³/h
Set point SP	1.2...20 l/min	0.07...1.2 m³/h
Reset point rP	1...19.8 l/min	0.06...1.19 m³/h
Frequency end point, FEP	4...20 l/min	0.24...1.2 m³/h
In steps of	0.1 l/min	0.005 m³/h
Frequency at the end point FRP [Hz]	100...1000	
Measuring dynamics	1:20	
Temperature monitoring		
Measuring range [°C]	-10...90	
Display range [°C]	-30...110	
Resolution [°C]	0.5	
Set point SP [°C]	-9...90	
Reset point rP [°C]	-10...89	
In steps of [°C]	0.5	
Frequency start point, FSP [°C]	-10...70	
Frequency end point, FEP [°C]	10...90	

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Frequency at the end point FRP [Hz]	100...1000	
Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)	± 2 % MEW; (water)	
Repeatability	± 0,5 % MEW	
Temperature monitoring		
Accuracy [K]	± 1	
Response times		
Flow monitoring		
Response time [s]	1; (dAP = 0)	
Damping process value dAP [s]	0...5	
Temperature monitoring		
Dynamic response T05 / T09 [s]	T09 = 6	
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; frequency output; switch-on/switch-off delay; Damping; Display unit	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis	
SIO mode	yes	
Required master port type	A	
Process data analogue	2	
Process data binary	2	
Min. process cycle time [ms]	3	
Supported DeviceIDs	Type of operation	DeviceID
	Default	484
Operating conditions		
Ambient temperature [°C]	0...60	
Note on ambient temperature	medium temperature < 80 °C	
	medium temperature < 90 °C: 0...50 °C	
Storage temperature [°C]	-20...80	
Protection	IP 65; IP 67	
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	

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CPA approval		model number	001VO
		accuracy class	-
		maximum allowable error	± 2 % FS
		Q (min)	0,09 m³/h
		Q (t)	0,24 m³/h
		Q (max)	1,2 m³/h
Shock resistance		DIN EN 60068-2-27	5 g (11 ms)
Vibration resistance		DIN EN 60068-2-6	with water / 10...50 Hz 1 mm
			with water / 50...2000 Hz 2 g
MTTF	[years]	342	
UL approval		UL Approval no.	I001
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data

Weight	[g]	474
Materials		stainless steel (1.4404 / 316L); PC; PBT+PC-GF30; PPS; TPE-U
Materials (wetted parts)		stainless steel (1.4404 / 316L); ETFE; PA 6T; PPS; FKM
Tightening torque	[Nm]	30
Process connection		threaded connection G 1/2 DN8

Remarks

Remarks	MW = measured value
	MEW = Final value of the measuring range
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



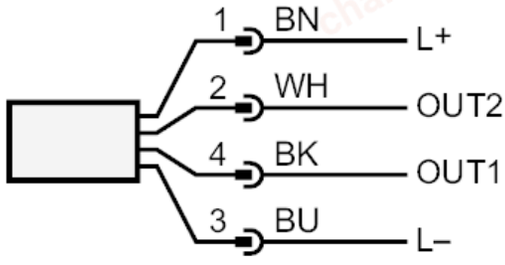
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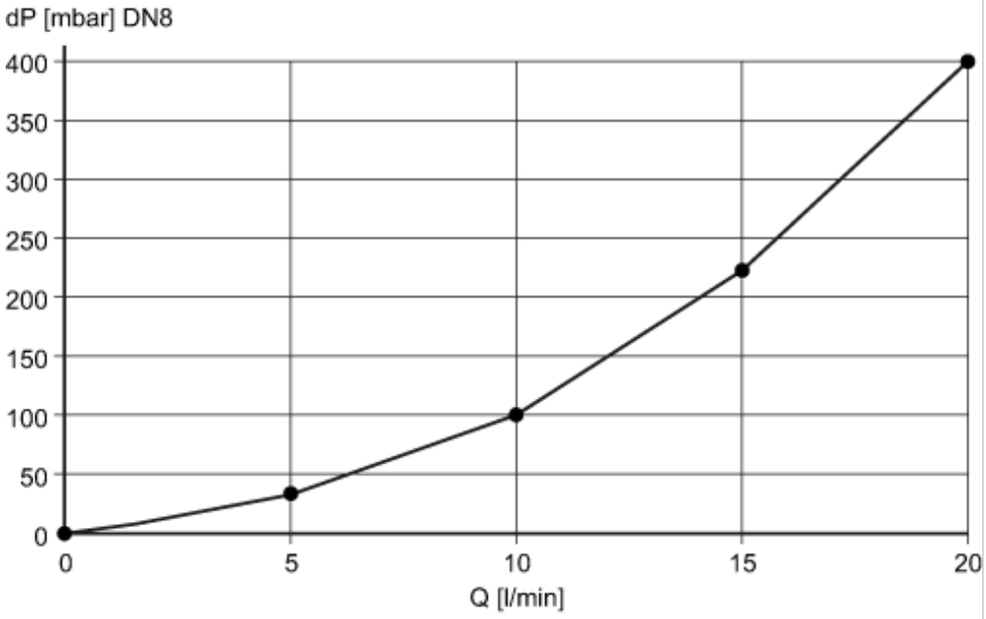
Connection



OUT1:	Flow monitoring
-	switching output
-	frequency output
-	IO-Link
OUT2:	flow monitoring and temperature monitoring
-	switching output
-	frequency output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity

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pressure rating (bar)

